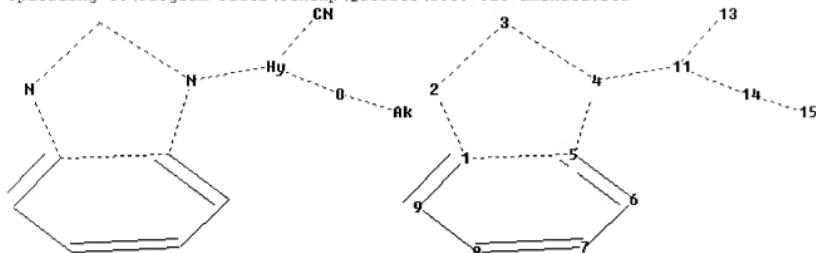


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Uploading C:\Program Files\Stnexp\Queries\10597828-amended.str



chain nodes :

11 13 14 15

ring nodes :

1 2 3 4 5 6 7 8 9

chain bonds :

4-11 11-13 11-14 14-15

ring bonds :

1-2 1-5 1-9 2-3 3-4 4-5 5-6 6-7 7-8 8-9

exact/norm bonds :

1-2 1-5 2-3 3-4 4-5 4-11 11-13 11-14 14-15

normalized bonds :

1-9 5-6 6-7 7-8 8-9

isolated ring systems :

containing 1 :

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 11:Atom

13:CLASS 14:CLASS 15:CLASS

Generic attributes :

11:

Saturation : Unsaturated

Number of Carbon Atoms : less than 7

Number of Hetero Atoms : Exactly 1

Type of Ring System : Monocyclic

Element Count :

Node 11: Limited

C,C4

S,S1

L1 STRUCTURE UPLOADED

=> d his

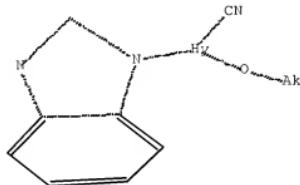
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L1 STRUCTURE UPLOADED

L3 33 S L1 SSS FULL

FILE 'CAPLUS' ENTERED AT 16:58:20 ON 05 NOV 2008  
L4 4 S L3  
L5 1 S US200!-597828/APPS

L6 1 S L4 AND L5  
L7 3 S L4 NOT L5

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L1 STR



=> fil caplus

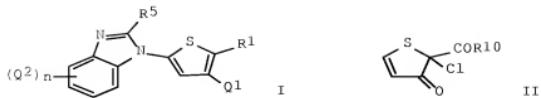
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VL6 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2008 ACS on STN - INSTANT  
PA Glaxo Group Limited, UK  
PATENT NO. KIND DATE ✓APPLICATION NO. DATE  
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PI WO 2005075465 A1 20050818 WO 2005-EP1432 20050207  
EP 1720864 A1 20061115 EP 2005-707356 20050207  
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, LV  
JP 2007522142 T 20070809 JP 2006-551827 20050207  
US 20070149519 A1 20070628 US 2006-597828 20060809 <--  
PRAI GB 2004-2809 A 20040209  
WO 2005-EP1432 W 20050207

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VL7 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN  
SO Bioorganic & Medicinal Chemistry Letters ✓ (2006), 16(24), 6236-6240

L7 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN  
PA Smithkline Beecham Corporation, USA  
PATENT NO. KIND DATE APPLICATION NO. DATE  
-----  
PI WO 2005037827 A1 20050428 WO 2004-US33585 20041012  
EP 1685128 A1 20060802 EP 2004-794836 20041012  
JP 2007509070 T 20070412 JP 2006-535584 20041012  
US 20070060576 A1 20070315 US 2006-575210 20060410  
PRAI US 2003-511991P P 20031016  
WO 2004-US33585 W 20041012  
OS CASREACT 142:430276; MARPAT 142:430276  
GI



**AB** Title compds. [I; R1 = H, alkyl, alkenyl, alkynyl, COR7, CO2R7, cyano, (substituted) heterocyclyl, etc.; Q1 = (R2)a(Y1)b(R2)cR3; a, b, c, aa, bb, cc = 0, 1; ≥1 of, a, b = 1; n = 0-4; Q4 = (R2)aa(Y2)bb(R2)ccR4; Y1, Y2 = O, CO, CO2, OSO2, CONR7, etc.; R2 = alkyne, alkenylene, alkynylene; R3, R4 = H, halo, alkyl, alkenyl, alkynyl, COR7, CO2R7, NO2, cyano, N3, etc.; R5 = H, halo, alkyl, alkenyl, cycloalkyl, OR7, NHSO2R7, etc.; R7 = H, alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl], were prepared by treatment of the corresponding N-unsubstituted benzimidazoles with 2-chloro-3-oxo-2,3-dihydrothiophene-2-carboxylates (II; R10 = alkyl, alkenyl, alkynyl, cycloalkyl, cycloalkenyl, protecting group) in the presence of base. Thus, benzimidazole in CHCl3 was treated with Me 2-chloro-3-oxo-2,3-dihydro-2-thiophencarboxylate and NaHCO3 followed by stirring for 16 h to give Me 5-(1H-benzimidazol-1-yl)-3-hydroxy-2-thiophencarboxylate.

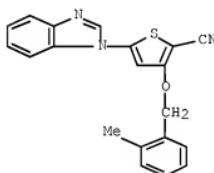
**IT** 660868-54-2 660869-82-9

**RL:** PRPH (Prophetic)

(Process for preparing thiarylbenzimidazoles from benzimidazoles and 2-chloro-3-oxo-2,3-dihydrothiophene-2-carboxylates.)

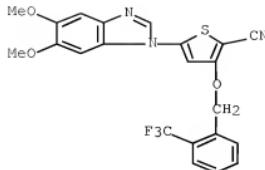
**RN** 660868-54-2 CAPLUS

**CN** 2-Thiophencarbonitrile, 5-(1H-benzimidazol-1-yl)-3-[(2-methylphenyl)methoxy]- (CA INDEX NAME)



**RN** 660869-82-9 CAPLUS

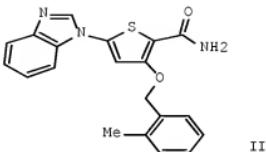
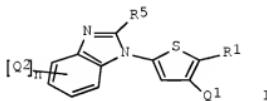
**CN** 2-Thiophencarbonitrile, 5-(5,6-dimethoxy-1H-benzimidazol-1-yl)-3-[(2-(trifluoromethyl)phenyl)methoxy]- (CA INDEX NAME)



RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7	ANSWER 3 OF 3 CAPLUS COPYRIGHT 2008 ACS on STN			
AN	2004:143141 CAPLUS <u>Full-text</u>			
DN	140:199325			
TI	Preparation of benzimidazolyl substituted thiophenes as Polo like kinases (PLK) inhibitors for treating cancer			
IN	Andrews, Clarence W., III; Cheung, Mui; Davis-Ward, Ronda G.; Drewry, David Harold; Emmite, Kyle Allen; Hubbard, Robert Dale; Kuntz, Kevin W.; Linn, James Andrew; Mook, Robert Anthony; Smith, Gary Keith; Veal, James Marvin			
PA	Smithkline Beecham Corporation, USA			
SO	PCT Int. Appl., 235 pp.			
	CODEN: PIXXD2			
DT	Patent			
LA	English			
FAN.CNT 1				
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI WO 2004014899	A1	20040219	WO 2003-US24272	20030804
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KE, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2493908	A1	20040219	CA 2003-2493908	20030804
AU 2003265348	A1	20040225	AU 2003-265348	20030804
AU 2003265348	B2	20070816		
EP 1546137	A1	20050629	EP 2003-784888	20030804
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
BR 2003013160	A	20050712	BR 2003-13160	20030804
CN 1688576	A	20051026	CN 2003-823755	20030804
JP 2006505522	T	20060216	JP 2004-527723	20030804
NZ 538134	A	20060331	NZ 2003-538134	20030804
RU 2296758	C2	20070410	RU 2005-102390	20030804
ZA 2005000864	A	20060426	ZA 2005-864	20050128
NO 2005000525	A	20050506	NO 2005-525	20050131
US 2006074119	A1	20060406	US 2005-522958	20050131
MX 2005PA01544	A	20050419	MX 2005-PA1544	20050208

IN 2005KN00321	A 20060106	IN 2005-KN321	20050302
US 20080269298	A1 20081030	US 2008-113224	20080501
PRAI US 2002-402008P	P 20020808		
WO 2003-US24272	W 20030804		
US 2005-522958	A1 20050131		
OS MARPAT 140:199325			
GI			



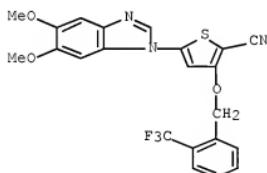
**AB** The title compds. [I; R1 = H, alkyl, COR7, CO2R7, etc.; Q1 = OCH2Ph, NHCH2Ph (both substituted on Ph ring), etc.; n = 0-4; Q2 = OMe, Cl, Br, etc.; R5 = H, halo, alkyl, etc.; R7 = H, alkyl, cycloalkyl, etc.], useful for treating a condition mediated by PLK, were prepared E.g., a multi-step synthesis of II which showed pIC50 of > 7 in assay for inhibition of PLK1, was given. The pharmaceutical composition comprising the title compds. I is claimed.

**IT** 660869-82-9P

**RL:** PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of benzimidazolylthiophenes as Polo like kinases (PLK) inhibitors)

**RN** 660869-82-9 CAPLUS

**CN** 2-Thiophenecarbonitrile, 5-(5,6-dimethoxy-1H-benzimidazol-1-yl)-3-[(2-(trifluoromethyl)phenyl)methoxy]- (CA INDEX NAME)

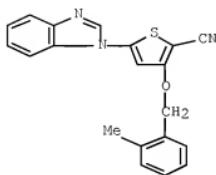


**IT** 660868-54-2P

**RL:** PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of benzimidazolylthiophenes as Polo like kinases (PLK) inhibitors)

**RN** 660868-54-2 CAPLUS

CN 2-Thiophenecarbonitrile, 5-(1H-benzimidazol-1-yl)-3-[(2-methylphenyl)methoxy]- (CA INDEX NAME)



RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FULL ESTIMATED COST	ENTRY	SESSION	
	19.74	203.95	
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL	
CA SUBSCRIBER PRICE	ENTRY	SESSION	
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SESSION WILL BE HELD FOR 120 MINUTES  
STN INTERNATIONAL SESSION SUSPENDED AT 16:59:54 ON 05 NOV 2008